Volume VII, Number 5

May, 1907

# THE AMERICAN MUSEUM JOURNAL

Published monthly from October to May inclusive by
THE AMERICAN MUSEUM OF NATURAL HISTORY
NEW YORK CITY

# American Museum of Natural History Seventy-seventh Street and Central Park West, New York City

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THE AMERICAN MUSEUM OF NATURAL HISTORY was established in 1869 to promote the Natural Sciences and to diffuse a general knowledge of them among the people, and it is in cordial cooperation with all similar institutions throughout the world. The Museum authorities are dependent upon private subscriptions and the dues from members for procuring needed additions to the collections and for carrying on explorations in America and other parts of the world.

The membership fees are,

All money received from membership fees is used for increasing the collections and for developing the educational work of the Museum.

The Museum is open free to the public on every day in the year.





THE VICTORIA FALLS OF THE ZAMBEZI RIVER

More than a mile wide and 400 feet high. Only part of the width shows in the view

# The American Museum Journal

VOL. VII

MAY, 1907

No. 5

### THE DOUGLAS AFRICAN COLLECTION.



HROUGH the generosity of Messrs. Percy R. Pyne, Cleveland H. Dodge and Arthur Curtiss James, the Museum has acquired a large ethnological collection which was made recently by Mr. Richard Douglas in south central Africa. This acquisition is of particular importance, not only on account of the great

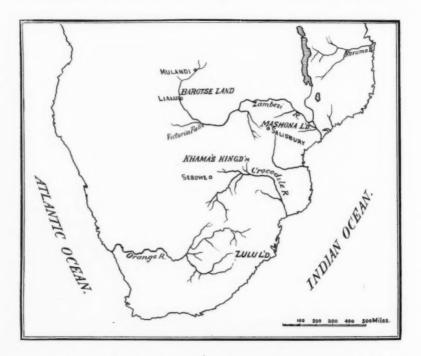
amount of material received, but also because heretofore the Museum has had few and only isolated specimens from the Dark Continent.

Africa is the primitive home of the negro race, representatives of which have been more or less a factor in the Occidental civilized world since the early days of Egypt. Upon the royal tombs and temples of Karnak, Luxor and Thebes we find in color and relief triumphal and other processions in which appear now and again among the captives or the slaves the unmistakable facial features presented by the negro of today, showing that there has been practically no change for thousands of years. The permanence of these characteristics is surprising to those who believe man to have come into existence within the last eight or ten thousand years of the earth's history. In spite, however, of this conservatism in feature, hair and complexion, the black peoples of Africa present great variety of anatomical, linguistic and tribal differences, ranging from the illusive pigmy of the Congo forest to the tall, clean, light colored Zulu of the South.

Along the Upper Nile and westward along the borders of the Sahara there is a broad belt of dark-skinned peoples where the lighter Arabian blood of the northeast gradually shades into the black of the Congo and the South. The arts and culture too of the Mediterranean states that followed the Arabic intrusion were gradually overwhelmed by the great monotony of native African barbarism. Yet for centuries, possibly while the savages of the stone age were hacking each other to pieces in primeval Europe, the peoples of the Dark Continent were smelting and forging iron, cultivating their fields with iron hoes and rising against their enemies with iron spears and swords. Study of Africa proves

that an "iron age" is not of itself to be regarded as a guarantee of an advanced order of civilization. The effect of the use of iron implements is but one of the many interesting problems arising from the study of the Dark Continent, all of which render an ethnological collection from any of her people a matter of great educational value.

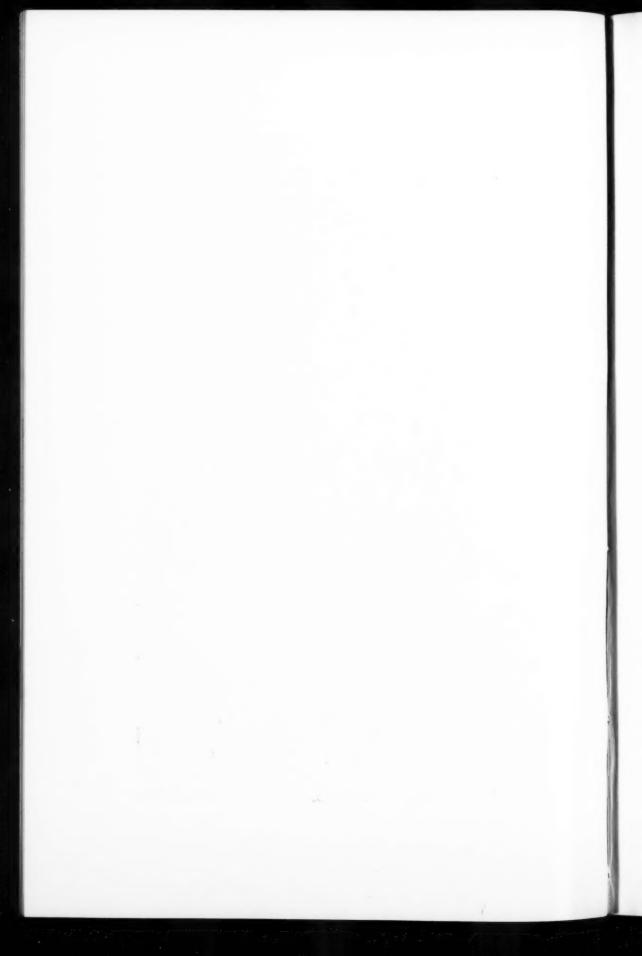
During the past year Mr. Douglas visited Barotse and Bechuanaland. As may be seen from the map, these territories occupy the entire central portion of that part of Africa lying between the southern borders of the Congo Free State and the Orange river. This region is cut into



two parts by the Zambezi river, well known for its beautiful Victoria Falls. All the interior of South Africa has been for some centuries the home of a large division of the so-called "Bantu" peoples, the dominant negro race. It is generally agreed that the Bantu originated somewhere near the head-waters of the Nile. As they increased in numbers, they migrated southward and eastward, dominating the whole continent from the Sahara to the Cape of Good Hope. The Bantu horde which rolled out from the north into the valley of the Zambezi and into the



A BECHUANA VILLAGE



Kalahari Desert, is chiefly known under the name of Bechuana. As a matter of fact, however, this name belongs to a very small group of tribes that drove out the original inhabitants, who may have been the Bushmen, and took possession of their lands. The best known divisions of these Bantu intruders are the Bechuana, Zulu, Mashona, Barotse and Basuto.

Mr. Douglas writes in part regarding the expedition as follows:

"I reached Cape Town, S. A., about May 1, leaving directly for Bulawayo, South Rhodesia, arriving there May 5. After a short stay I left for Bechuanaland and arrived at Palapve Road at 10 o'clock in the evening of May 15. Early next morning I arranged with the Bechuana Trading Company for transportation to Serowe, King Khama's "stardt" or native village, located some 60 miles from Palapve Road, and set out, arriving on the third day at 1 P. M. The following day I called upon the king but learned that he was away, inspecting one of his cattle posts, and I did not meet him for three days. Our meeting was at six o'clock in the morning. The native custom is for all the Chief Headmen to meet at daybreak in the "kglotta" or Court Yard, to dispose of the native criminals, brought in the day before for trial. This meeting, as well as witnessing the disposition of criminals proved very interesting and also afforded me the very best opportunity of getting down to business with the king and all his people. After I had been introduced to the king by one of his grandsons and had made my purpose known, I was received very cordially and the king gave out word to all his chiefs to give me all the help I required. In this way I was enabled to make my collection without further trouble. The king gave me free transportation to the railroad for all my material, and after numbering and packing my collection I started upon my return journey.

"My next stop was at Salisbury, whence I went to the Mażoi District, Mount Darwin and the Inyanga Districts, all in Mashonaland. My collections here were not large. After packing and securing some twenty-five carriers, I left for Salisbury, camping with my carriers every night. In three weeks time I had covered nearly 500 miles on a bicycle, traveling over a very mountainous country with only Kaffir paths to follow. Upon my return to Salisbury I repacked my collections, paid my carriers and left immediately for Bulowayo.

"Upon the 20th of July I left Bulowayo for Barotse land, King Lewanika's Country, for whom I have acted as confidential Agent for the past four years. Upon my return to Africa, I had notified King Lewanika that I intended visiting his country as soon as he could get boats down to Livingstone to take me up the river to Lialui, his capital. Upon my arrival at Victoria Falls, July 21, I immediately went to Old Livingstone to see Imasho, the king's Headman to see if the boats were waiting, but found that they were still on their way down, he having heard by a runner or messenger that the king was sending for me.

"That evening upon my return to the Falls Hotel I found a message telling me that the Induna in charge of the boats had arrived. I immediately made ready to leave for Old Livingstone. The next morning, July 28, I was up at break of day and found the king's carriers waiting for me. There were sixteen in all, eighteen including my interpreter and cook. Upon reaching Old Livingstone, which was late in the day, I camped for the night, making plans to leave at daybreak for the boats, which had to be left five miles farther up the river, on account of the dangerous rapids. We reached the boats at 10 A. M. and left immediately for Kazeungula the first important native village on our route, although there are many small kraals between. Only one white man trades with the natives in that village. After leaving Kazeungula and paddling two days we came to the great game country. Here I camped three or four days to secure food for the natives.

"August saw us again on our way up the river toward Lialui. After three days we reached Nilesia, which to my mind is the most beautiful spot on the whole river. Here the country is covered with thick bushes and abounds in lions. We could hear them roaring long before dark, and they kept up their noise all night. We had to keep big fires going to keep them away. Early next morning a Dutch transport rider came to my camp and asked me to assist him in hunting some lions which had killed five of his oxen. That night we took up the spoor and after following it for four miles, we came upon one lion, one lioness and two cubs. We got the lion and both cubs, but the lioness, although badly wounded, got away into the tall grass. We did not go after her, as it is a very dangerous undertaking to follow up a wounded lion, a thing that only inexperienced hunters will do, as there is only one chance in ten of getting away alive. After removing and caring for the skins, we proceeded on our journey, but since we had many rapids to cross, our progress was very slow. We reached more rapids next day about noon; here we had to take everything out of the boats and pull them overland, a distance of 300 yards. This took us until 4 o'clock, and we pitched



A GIRL GRINDING KAFFIR CORN



camp some four miles further up the River that night. On my way to this camp I collected many stone implements.

"We reached Lialui late in the afternoon of Thursday, August 28, having been one month in covering the 500 miles from Victoria Falls. During my stay at Lialui from August 28 to September 22, I was with the king daily and by his influence secured many fine specimens."

All the collections made by Mr. Douglas are now in the Museum. He has lived in South Africa for about twenty years and is not only familiar with the natives but also able to speak some of their languages. With the collection are numerous notes and other information of considerable ethnological value. The larger part of the collection is from Barotseland.

The Barotse kingdom extends from the vicinity of Victoria Falls on the Zambezi to the Congo Free State and eastward to the land of the Bashukulombwe, one of the recent conquests of the present king. It is now in control of King Lewanika under the protection of the British Government. While the Barotse are evidently a part of the great Bechuana group, their real relationship is not well known. They appear to be closely related to the Zulu, but they are generally looked upon by other Bechuana people as being the oldest original stem, from which the others sprang. However this may be, they are in many respects the strongest and most powerful group in Africa. Their history is exceedingly interesting and suggestive, one incident of which may be mentioned here. About 1835 the chief of Makalolo, a branch of the Basuto, extended his empire to the borders of the Barotse, made war upon them and soon brought them under his control. These foreign kings ruled until 1879, when the Barotse revolted and massacred all the Makalolo they could find. During their subjection, however, the Barotse had learned the Makalolo language, and that is still the official tongue. Thus we have the people of a kingdom speaking a foreign language to the exclusion of the native tongue, the whole change having taken place within a period of forty-four years. Since in other respects the history of the Barotse is similar to that of other native African tribes, the suggestion is that many times in the past peoples may have changed their language and customs in an equally rapid manner.

The greater part of the Bantu people in South and East Central Africa, support themselves by cattle raising, while the other Bantu tribes occupying the north and west portions of Africa support themselves by agriculture. The Barotse are situated on the dividing line between these two types of civilization, consequently we find what may be expected,— a people who are engaged in both agriculture and cattle raising. The raising of cattle, however, is almost entirely in the hands of the king and the various chiefs, practically no one being allowed to own cattle except the few head men. These cattle are the chief source for revenue for the native kingdom. The food of the common people is chiefly milk and the products of their gardens. While the men sometimes clear the fields, agriculture is almost entirely the work of the

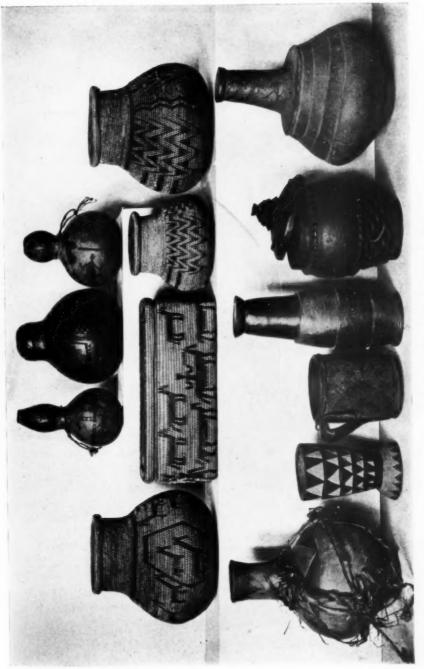


A HOE FROM KHAMA'S KINGDOM, BECHUANALAND

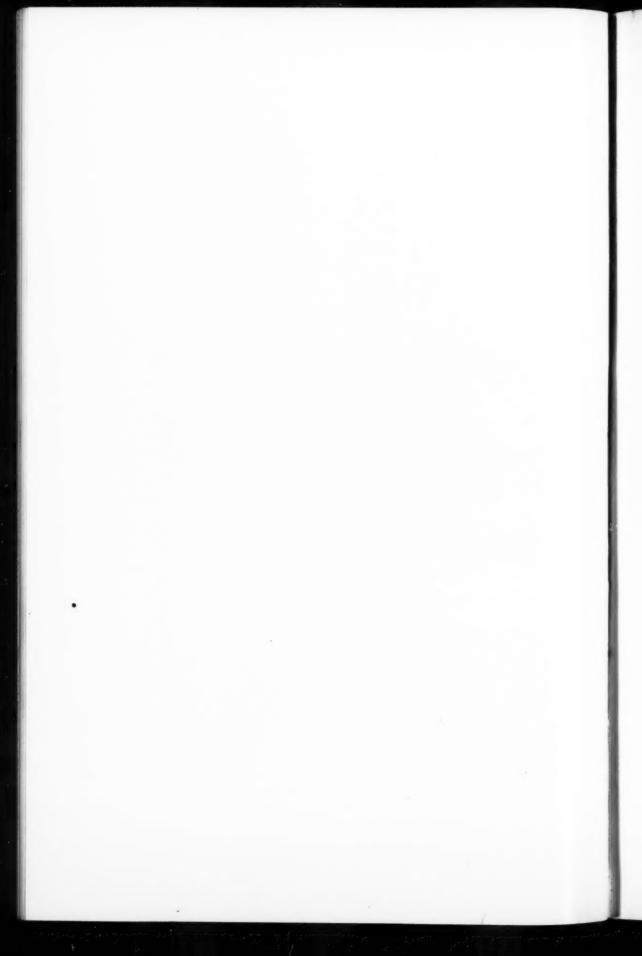
The blade is about 2 feet long

women. The chief agricultural implement is the hoe. The hoe of Bechuanaland is a large leaf-shaped iron blade in a short wooden handle, while the hoes in Barotseland have small thin metal blades, similar to modern American hoes. The products of their fields are Kaffir corn (a kind of millet), Indian corn and yams. The villages are groups of circular, thatched huts, often clustered around the cattle kraal of a chief.

These people are skilled in the manufacture of pottery and wooden vessels. The wooden vessels are carved from tree trunks, hollowed out with the adze and finished with a peculiar hooked knife. The



BASKETS, POTTERY, GOURDS AND WOODEN WARE From Barotseland and Khama's Kingdom



surface of the vessel is burned with a hot iron and afterwards smeared with hot bee's wax, which is thoroughly rubbed into the wood, giving the surface a dead black finish. Perhaps the finest type of wooden vessel is the oval flat tureen with a lid. On the top of the lid is usually a carved elephant, hippopotamus or other large quadruped.

Pottery is of several forms, varying from large handsome jars to small drinking cups with handles. The most common type, however, is the water bottle. Two kinds of clay are used, which are mixed in

certain proportions and modeled by a combination of the coil and beating processes. In the beginning, the bottom of the pot is fashioned in a shallow basketwork tray, which is turned with the left hand somewhat after the fashion of a potter's wheel. All of the pottery in the collection is red, but decorated with triangular designs in black or dark red. These designs are quite simple and consist usually of single or double rows of equilateral triangles. The same sort of decoration is applied to wooden ware, the triangles being produced by scraping away the previously blackened surface of the wood. The people from whom these collections came

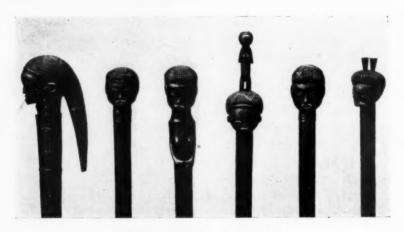


A CARVED WOODEN STOOL
About 14 inches high

also manufacture black pottery of excellent quality, but this art is fast disappearing and no specimens could be obtained.

Wood carving is rather highly developed, the best types of which are to be seen in stools and sticks. While the common people usually sit upon the ground or upon mats, chiefs and other prominent people sit upon low wooden stools. These stools are usually cut from a single block of wood. One very common type is that in which the base and the top of the stool are joined by a human figure, supported behind by two or three upright posts. These figures always have the attitude of

supporting the top of the stool upon the head. In some stools however, these figures are wanting, and the decoration consists of small geometrical designs arranged symmetrically on the posts. Wooden pillows are similar in form to the stools and the decorations are of the same type. Single pillows are usually used by the unmarried, while married persons use a double pillow, joined by a wooden chain cut from a single piece of wood. Aside from these, the collection contains a great many other carved objects such as a wooden figure, idols, combs for the hair and ear ornaments. Among the things deserving special mention, are the knob-sticks from Mulandi, which have a finish and execution far superior to anything else in the collection.



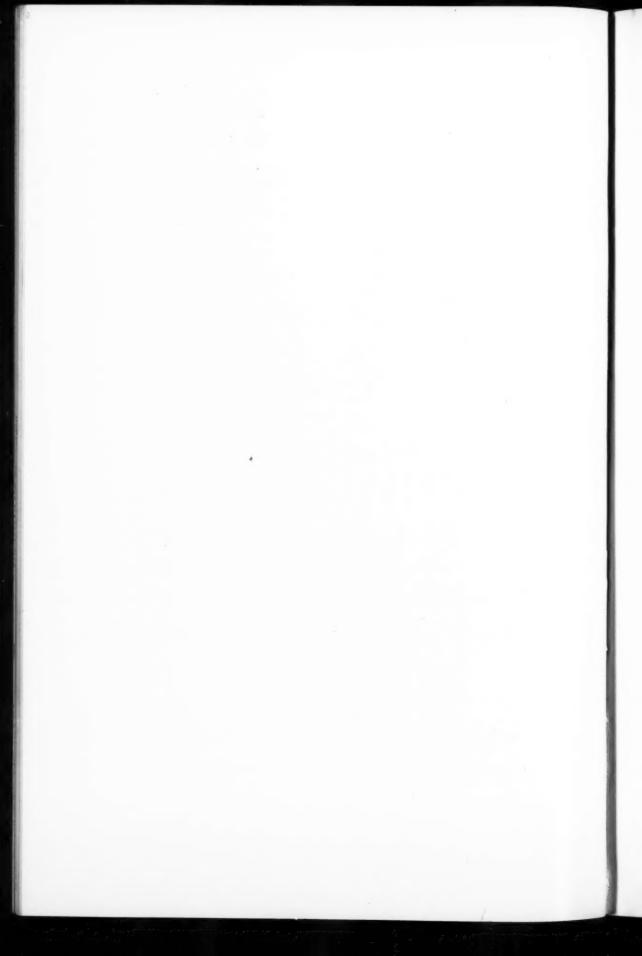
CARVED KNOB-STICKS FROM MULANDI

The collection is rich in basketry and matting. One of the most remarkable things about this basketry is the great variety of weave. In it we find wicker, checker, twill, close twine, open twine, twilled twine, three-ply twine, ti twine, one-rod coil, bifurcated coil, grass coil, open grass coil, coil without foundation and wrapped weave. Of these, the one-rod coil and open twine are the finest types. The decorations are in dead black, produced by steeping the material in marsh mud. It is of special interest to find the ti weave here, since this has heretofore been considered peculiar to the Pomo Indians of California. The collection contains one large storage basket similar to one shown on page 81. All such baskets are of the open grass coil type. The designs upon mats and baskets are triangular like those upon pots and wooden



MAKING, A LARGE STORAGE BASKET

A Basuto man is in the basket



vessels, though occasionally the forms of animals and men are found upon baskets.

In south and central Africa the Barotse have great reputation as workers in iron, but their implements are crude. The smelting is done with a rude furnace, and the forging with rude bellows made of skin, stone anvils and in some cases with stone hammers too. Nevertheless with these crude tools the native blacksmiths turn out some excellent knives, daggers, axes, spears and swords. The collection contains a great variety of iron tools, spears and ear ornaments, illustrating quite completely the native iron industries.

A very conspicuous character in religious and ceremonial activities in all African tribes is the so-called witch doctor, who is in reality a priest. Such men have various outfits, consisting of charms, medicines and regalia, but in almost every case they have upon a string two slender pieces of ivory representing women and two hoofs of some ruminant representing men, together with two or more vertebræ of a monkey or other small mammal. The vertebræ are said to represent the spirit of the witch, as it is sometimes called, by whose help the priest accomplishes his work. This collection contains one complete witch doctor's outfit together with other medicine articles. The witch doctor is a powerful man in the community and performs various functions. sides curing diseases, he discovers by magic processes the identity of criminals and traitors, directs all ceremonies and acts as chief councilor to the king or chief. The significance of his name is probably due to a widely spread belief in Africa that every death is the result of the magic power of some living person or witch. As a result of this the priest or witch doctor is called in to investigate every death, and as a rule he names some individual who is held responsible. It goes without saving. that witch doctors and chiefs take advantage of this custom to get rid of troublesome individuals. This is one of the many dark sides to the Dark Continent.

There are many other interesting groups of objects in this collection, among which may be mentioned native fibre, foods, costumes, weapons, pipes and musical instruments. The series of drums is particularly fine. The Museum now has a good beginning toward an African hall in which will be shown the original culture of the great Negro branch of the human family.

CLARK WISSLER.

### DEPARTMENT OF MINERALOGY.



IONG recent additions to the cabinet of minerals the new form of Beryl from near Spruce Pine, Mitchell Co., N. C., merits notice. This is an unusual tabular form of the mineral and was discovered by Mr. H. W. Williams. For some time it escaped proper identification on account of its peculiar crystalline form.

The crystal consists of a broad basal plane and a hexagonal pyramid, the two united in thin plates inclosed in a coarse granitic matrix. Professor Moses of Columbia University has described this remarkable occurrence. The specimens are valued as crystallographic novelties.

A really superb specimen of Polybasite has been obtained through the Bruce Fund. The specimen was found in Sonora, Mexico, and brought to the Museum by Mr. A. B. Frenzel. It is a splendid group of lustrous, intersecting plates, the plates being tabular prisms with pyramidal edges.

The third notable addition is a unique and particularly beautiful specimen of crystallized Native Copper. It is a thicket of nail-like, elongated prismatic crystals, possibly tetrahexahedrons, with minutely dentate edges, of brilliant surface, and associated with thickly clustered individual crystals. This specimen came from Bisbee, Arizona, where it was found in a pocket with other similar specimens of an inferior quality. It is implanted on a limonitic base. The specimen is not large, but its effectiveness as a mineral development is remarkable.

A specimen of crystallized Andorite from Oruro, Brazil, also secured through the Bruce Fund, is astonishingly good. Large, heavy tables in this specimen replace the diminutive crystals usually associated with this interesting sulph-antimonide of lead and silver. Pink Beryls from Haddam, Native Lead (F. A. Canfield) from Sweden, Serpentine and the famous Asbestos (Chrysotile) from the Grand Canyon of the Colorado (F. F. Hunt), with a series of attractive Japanese specimens, obtained by exchange with Professor T. Wada of Tokio, Japan, should also be mentioned.

L. P. G.

### MUSEUM NEWS NOTES.

The Museum is now open free to the public on every day of the week. This important change in the policy of the institution has been made by President Jesup in order to extend its usefulness as widely as possible, it being felt that the reservation of two days in the week, as heretofore, for Members and students was depriving thousands of people of the privilege of seeing the collections, without compensating advantages to Members, while students are now amply provided for at all times in other ways.

Professor H. F. Osborn returned March 31 from his trip to Egypt to organize the work which the Museum is carrying on there in the search for the remains of the ancestors of the Elephant and other mammals. Messrs. Granger and Olsen have remained in the desert of Fayoum to prosecute the excavations. Professor Osborn reports excellent initial success and bright prospects.

Miss Adele M. Fielde has presented to the Department of Ethnology a series of twenty-seven Chinese paintings representing various mythical and real scenes from Chinese life. These paintings were made by a native artist in 1888 at the suggestion of Miss Fielde and were used by her as illustrations in her books, "Chinese Night's Entertainments" and "Corners of Cathay."

The Department of Ethnology has recently received from Mr. Edward J. Knapp a series of wooden masks from the Eskimo of Point Hope, Alaska. Among them are several interesting portraits, done with remarkable skill, and several ceremonial masks with markings representing the flukes of the whale.

DIRECTOR H. C. Bumpus represented the Museum at the ceremonies connected with the dedication of the new buildings of the Carnegie Institute, in Pittsburgh, April 11-13.

Dr. Allen represented the Museum at the spring meeting of the National Academy of Sciences in Washington April 16 to 18.

Elaborate preparations have been made by the New York Academy of Sciences for the appropriate celebration, on May 23, of the two hundreth anniversary of the birth of the celebrated Swedish naturalist, Linnæus. The exercises will begin in the morning at the American Museum of Natural History with addresses and an exhibition of the animals, minerals and rocks first classified by Linnæus; will continue in the afternoon at the Botanical Garden and Zoölogical Park, with addresses and suitable exhibits of plants and animals and the dedication of the Bridge, and will be concluded in the evening with simultaneous exercises at the Museum of the Brooklyn Institute, Eastern Parkway, and at the New York Aquarium in Battery Park. The exercises at the Museum will include, at 11 o'clock, an address by Mr. Archer M. Huntington, President of the American Geographical Society, on "North American Geography at the Time of Linnæus" and one by Dr. Joel A. Allen, Curator of Mammalogy and Ornithology at the Museum, on "Linnæus and American Zoölogy," while Dr. E. O. Hovey, Secretary of the New York Academy of Sciences, will read letters concerning the anniversary from other societies.

A FINE collection of European Myriapods, comprising 238 species has recently been acquired by the Department of Invertebrate Zoölogy. They were collected by Dr. Carl W. Verhoeff of Dresden, Germany, and embrace specimens from Germany, Austro-Hungary, Greece, the Pyrenees, European Turkey, France, Switzerland, Portugal, Italy, and Norway, together with a few from Tunis (Africa). The peculiar animal forms comprised in the class Myriapoda are familiar to all under such names as centipedes, millepedes and "thousand-legged worms." Like the true worms their bodies are long, cylindrical or flattened, and they are divided into a varying number of ring-like segments. They differ from the worms, however, in possessing one or two pairs of jointed legs for each segment, while their jaws, antennæ and internal organs closely resemble those of insects. Standing thus as an intermediate or transitional link between these two groups, myriapods are of peculiar interest to biologists. The centipedes, which differ from the millepedes in having but one pair of legs for each segment instead of two, are carnivorous and kill the insects upon which they feed by their poisonous bite. The poison also serves as a protection against enemies. The millepedes on the other hand are vegetarian in their habits, and therefore harmless, though some species are obnoxious to farmers because of the damage they work to crops.

Mr. Frank M. Chapman, Associate Curator of Mammology and Ornithology, spent a fortnight during April visiting several of the Bahama Islands for the purpose of collecting nests, eggs and young of certain birds for the habitat groups now being prepared at the Museum. The authorities of the Carnegie Laboratory at Dry Tortugas, Florida, placed at Mr. Chapman's disposal the yacht "Physalia" and Dr. A. G. Mayer, director of the laboratory, accompanied him on the trip.

Mr. J. D. Figgins, of the Department of Preparation and Installation, left New York on April 6 for Key West, Florida, where he will join Mr. Chapman for additional field work in Florida. From Florida the expedition will go to Louisiana.

The Department of Mammalogy has recently acquired by purchase a collection of mammals from China. The series includes 106 specimens, mostly of species the size of a Hare or larger, of which 43 are from the Island of Hainan and 63 from the interior of China, near the foot of the Taipashiang Mountains. The latter are all new to our collection, and the Hainan specimens do not duplicate the material previously received from that island.

On March 29 a delegation of about forty teachers from Buffalo visited the Museum and spent considerable time under guidance in studying the work carried on here in connection with the schools of this city. The system of lectures to children, the circulating nature study collections and other educational work of the institution were explained and demonstrated to the visitors.

The National Kindergarten Association opens an exhibition at the Museum on May 2 which will continue through the space of three weeks.

THE next number of the JOURNAL will be issued in October.

### MEETINGS OF SOCIETIES.

MEETINGS of the New York Academy of Sciences and Affiliated Societies are held at the Museum according to the following schedule:

On Monday evenings, The New York Academy of Sciences:
First Mondays, Section of Geology and Mineralogy.
Second Mondays, Section of Biology.
Third Mondays, Section of Astronomy, Physics and Chemistry.

Fourth Mondays, Section of Anthropology and Psychology.

On Tuesday evenings, as announced:

The Linnæan Society, The New York Entomological Society and the Torrey Botanical Club.

On Wednesday evenings, as announced: The New York Mineralogical Club.

The programme of meetings of the respective organizations is issued in the weekly "Bulletin" of the New York Academy of Sciences and sent to the members of the several societies. Members of the Museum on making request of the Director will be provided with these circulars as they are published.

The meetings will be held throughout May and will then be discontinued for the summer, beginning again October 7 with the business meeting and section of geology and mineralogy.

## SPECIAL NOTICE TO MEMBERS.

A LECTURE WILL BE GIVEN BY

# COMMANDER ROBERT E. PEARY, U. S. N.

AT THE MUSEUM ON

TUESDAY, MAY 14, 8.15 P. M.

REGARDING

"The Work of the Peary Arctic Club in 1905-1906 and the Plans for 1907-1908."

NOTE.—The Auditorium will be reserved for members of the fluseum and their guests.

Special cards of admittance will be issued.

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### The American Museum Journal

EDMUND OTIS HOVEY, Editor
FRANK M. CHAPMAN,
LOUIS P. GRATACAP,
WILLIAM K. GREGORY,

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Subscription, One Dollar per year. Fifteen Cents per copy.

A subscription to the Journal is included in the membership fees of all classes of Members of the Museum.

Subscriptions should be addressed to The American Museum Journal, 30 Boylston St., Cambridge, Mass., or 77th St. and Central Park West, New York City.

Entered as second-class matter January 12, 1907, at the Post-office at Boston, Mass.

Act of Congress, July 16, 1894,

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E. W. Wheeler, Printer, Cambridge, Mass.